

OIPE

RAW SEQUENCE LISTING

DATE: 08/08/2001

PATENT APPLICATION: US/09/850,147

TIME: 07:56:57

Input Set : D:\Pa_00347.rpt

Output Set: N:\CRF3\08082001\I850147.raw

1 <110> APPLICANT: Andersen, Scott E.
 2 Edgerton, Michael D
 4 <120> TITLE OF INVENTION: Nucleic Acid Molecules And Other Molecules Associated With
 5 Plants
 7 <130> FILE REFERENCE: 38-21(51914)B
 C--> 9 <140> CURRENT APPLICATION NUMBER: US/09/850,147
 C--> 9 <141> CURRENT FILING DATE: 2001-05-08
 9 <150> PRIOR APPLICATION NUMBER: US 60/202,213
 11 <151> PRIOR FILING DATE: 2000-05-08
 13 <150> PRIOR APPLICATION NUMBER: US 09/654,617
 14 <151> PRIOR FILING DATE: 2000-09-05
 16 <150> PRIOR APPLICATION NUMBER: US 09/684,016
 17 <151> PRIOR FILING DATE: 2000-10-10
 19 <160> NUMBER OF SEQ ID NOS: 18014
 21 <210> SEQ ID NO: 1
 22 <211> LENGTH: 402
 23 <212> TYPE: DNA
 24 <213> ORGANISM: Sorghum bicolor ✓
 26 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-A3 ✓
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 30 ccgggcccggg ctcaccagct ggcccagtgga aggccttaaag acatgtgcca ggagaagggg 60
 32 ccttgaactt gtgtggtctg caccctaatt attgtctcaga tgtggcaatg gagcttctat 120
 34 attaagcttc gatgagaaga aggaaaggag atgtcaaggc cttcacagag accgaggaaa 180
 36 acaaccagat tccagggcca agggccttgga atcccatatt tcctttgact tcaggtggac 240
 38 aatttttagaa ggcaatatatt aaatctggaa ggggtaaaga acaatcagat ggtgttaatt 300
 40 gtggagggttc agatcataat gccatctgat gcattccatt tctggtttct tttgaacaca 360
 42 agtacaacaaa accaacggga ggggcataac ttctgtgttt cc✓ 402
 45 <210> SEQ ID NO: 2
 46 <211> LENGTH: 151
 47 <212> TYPE: DNA
 48 <213> ORGANISM: Sorghum bicolor
 50 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-A5
 52 <400> SEQUENCE: 2
 54 ggcgaggctg ctgctaaggc aacacggcgt gctacgatgg ctggaccacc acgacaactt 60
 56 catgccgttg ctgatcagga tcaacaacct ggagggcaga cttcatctac tccaccagga 120
 58 ccgtgctgtt cctgcgcggc gacggcacgc t✓ 151
 61 <210> SEQ ID NO: 3
 62 <211> LENGTH: 106
 63 <212> TYPE: DNA
 64 <213> ORGANISM: Sorghum bicolor
 66 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-B3
 68 <400> SEQUENCE: 3
 70 ccgggtccgg acccaggcgt ccgcggactc gtgggtcctg aatgactttt ttctggtttt 60
 72 gcgtgacgca tgcgaacaca tggcaatggc cgaatcacga attaga 106
 75 <210> SEQ ID NO: 4
 76 <211> LENGTH: 457
 77 <212> TYPE: DNA

ENTERED

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78 <213> ORGANISM: Sorghum bicolor
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81 <221> NAME/KEY: unsure
82 <222> LOCATION: (1)..(457)
83 <223> OTHER INFORMATION: unsure at all n locations ok
84 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-D11
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90 cagagatctg gtgcgcgcgc accgcgcgc caccgcgcgc cgtccaaaaa agctcggatt 120
92 gccccctgc ggcctgccc ccgcgcgcgc tggaggagg atcgaccgag gccctgaccg 180
94 gctgaggcc tccgtcacct ctgctgcgc ccgcgcgcgc ctgcgcctg ccagatcgag 240
96 aacatctcct ggcgaatcg agggcacgac ttcattcact gaccgcgcgc caggggagca 300
98 gctcgacctc cgacgtcccc atacggcctc gtcaggccag ctccgtgcag cagatagctg 360
W--> 100 cgatgcaagt aggacnagct gcatgaggct tatcggnag agcttgcggc cagagaccag 420
W--> 102 ggccatcggc cccacatgga ggcacatcan aagcaca 457
105 <210> SEQ ID NO: 5
106 <211> LENGTH: 277
107 <212> TYPE: DNA
108 <213> ORGANISM: Sorghum bicolor
110 <220> FEATURE:
111 <221> NAME/KEY: unsure
112 <222> LOCATION: (1)..(277) ok
113 <223> OTHER INFORMATION: unsure at all n locations ok
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120 gtgcctggcc tgcgcgcgc ccgcgcgcgc gtgcctggg cgctgctcg cccggacagc 120
122 ccagcacctc gtctgcgcg gcgacaccga cagcgcgcgc gcgtcgtgc agcgccttcg 180
W--> 124 tggccccggg ggggggaggg accngagct caaggacatc ttccgagccg aggaggacgc 240
126 ccggcggaac aaccagggaa cgtacgagag gatggtg 277
129 <210> SEQ ID NO: 6
130 <211> LENGTH: 261
131 <212> TYPE: DNA
132 <213> ORGANISM: Sorghum bicolor
134 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-F4
136 <400> SEQUENCE: 6
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140 atgttatcaa tggatggaac aacagagaaa gagtcagagt catcttcaaa tgatgataat 120
142 gcctgggatg gattccagtc tgcacaacca gtacctagct cagagaaaaa agattctgcc 180
144 aaaccggcag aacgcaagac ccgggggggg gggcgcaata caagacctat ctggagactc 240
146 accatctctc tcaatctcct c 261
149 <210> SEQ ID NO: 7
150 <211> LENGTH: 311
151 <212> TYPE: DNA
152 <213> ORGANISM: Sorghum bicolor
154 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-G1
156 <400> SEQUENCE: 7
158 gggcgaccac gcgtgcgagc attatcagat tcttcgtctg catttggtgg gagattatta 60
160 ggagtaggag taggattact acgttattat tactagttag tgagttagtg agtgatcgag 120

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162 cgaggatgct ggcgggtgttc aacggcggtg tgggtggaggt gccggcgagg ctggtggcgg 180
 164 tgggaagccg gacgccgtcg cccaagacca ggcggtacga gctcgctggc cggttcctgg 240
 166 gtgcctccga gccggccgtc ttcgtgcaga ttggcgacct cggccacctc gcttactacc 300
 168 acaacaacca g 311

171 <210> SEQ ID NO: 8

172 <211> LENGTH: 302

173 <212> TYPE: DNA

174 <213> ORGANISM: Sorghum bicolor

176 <220> FEATURE:

177 <221> NAME/KEY: unsure

178 <222> LOCATION: (1)..(302)

179 <223> OTHER INFORMATION: unsure at all n locations

180 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-G3

182 <400> SEQUENCE: 8

W--> 184 cgtccgnatt cccgggtcgcc ccggtcgccg tccctacctg tcccgggtcc agcacttgca 60
 186 tcccccccgcc gccggcggtcg ccggagcgga gcagagcagc cggagggccc gtcggatccg 120
 188 ccgccgcaaa gatgaatgac accgatgtag ccaagcagat ccagcagatg gtgcggttca 180
 190 tccgccagga gcccgacgag aaggccaacg acatctctgt gtatgccgag gaggaattct 240
 192 acattgagaa gttgcatttt gttgaatctg ataaaaagaa gatcaggcat gattatgaac 300
 194 gc 302

197 <210> SEQ ID NO: 9

198 <211> LENGTH: 157

199 <212> TYPE: DNA

200 <213> ORGANISM: Sorghum bicolor

202 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K1-G4

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 208 gatagttcat cacattgtta tggagctatt gcggtctcgg cctgataaga agccatgccc 120
 210 tgaagaggaa gatggtgagg ctatctgaca ttccttc 157

213 <210> SEQ ID NO: 10

214 <211> LENGTH: 385

215 <212> TYPE: DNA

216 <213> ORGANISM: Sorghum bicolor

218 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K2-A3

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 224 tctgcacctt attattgcta cagatgtggc aatgtagctt ctatattaag cttcgatgag 120
 226 aagatggaaa gagatgtcaa gttcttcaca gagaccgagg agaacaacca gatgcgaggc 180
 228 ccaaggactg cagtcaccata tttcctctga cttcagttgt acaattttag aagtcaatat 240
 230 ttaaactctg aaggggttaaa gatcaatcag atgtgtttat tgttgtaggt tcagatcata 300
 232 gtgcaagctg atgcattcga tttctgtttt cttttgacca catgtacaat agaccatcgg 360
 234 gagtgtcata ttttctgtta ttcct 385

237 <210> SEQ ID NO: 11

238 <211> LENGTH: 269

239 <212> TYPE: DNA

240 <213> ORGANISM: Sorghum bicolor

242 <220> FEATURE:

243 <221> NAME/KEY: unsure

244 <222> LOCATION: (1)..(269)

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252 ggaattngtt agagagcgga agcggcgccg accaccaga ccattcatat attggcgacg 120
254 ccggaggcca atgatggcac ggacgtgct accgctgtgg ggggggccga gccgccgcta 180
256 cctagactgc accttcacag gccttctcac cggctgaaag actgaagtat gctaactacta 240
258 agatggctga ggcgagggtg atcgcaaca 269 ✓
261 <210> SEQ ID NO: 12
262 <211> LENGTH: 475
263 <212> TYPE: DNA
264 <213> ORGANISM: Sorghum bicolor
266 <220> FEATURE:
267 <221> NAME/KEY: unsure
268 <222> LOCATION: (1)..(475) ✓
269 <223> OTHER INFORMATION: unsure at all n locations ✓
270 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K2-C5 ✓
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274 cggacgcgtg ggcaagcccc gccgcagaac ccaagcccca actccacgat gaggccgctcg 60
276 ctgctgagat ccacgtccca gctcctccgc cgccggagct actcctccgc atccgggcag 120
278 cctgagcgga aggtggccat cctcggcgcg gcggggcgca tcgggcagcc gctgtcgctg 180
280 ctcatgaagc tcaaccact cgtctcgctg ctctcgctct acgatattgc cggcaccoca 240
282 ggtgtcgcgg ccgacgtctc ccacatcaac tcccccgccc tgggtgaagg cttcatggga 300
284 gaggaacagc ttggggaagc gctagagggc tccgacgtgg taatcatccc ggctggcgctg 360
W--> 286 ccgaggaagc ccggcatgac cagngacgac ctcttcaata tcaacgctgg catcggttaag 420 ✓
288 aacctcagcg ccgccatcgc caagtactgg cccaatgccc ttggcaacat gatca 475 ✓
291 <210> SEQ ID NO: 13
292 <211> LENGTH: 572
293 <212> TYPE: DNA
294 <213> ORGANISM: Sorghum bicolor
296 <223> OTHER INFORMATION: Clone ID: LIB3476-001-Q6-K2-E1
298 <400> SEQUENCE: 13
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302 atttcgacca tgaagttgat taagcctcct aatgttggtc gcatatatga ggtgatggga 120
304 agtaaaacaa agatctacat tgtgttgag tatgttactg gtggcgagct ttttgacaca 180
306 attgctaacc atggtcgaat gaggaagat gaggaagga gatacttcca acagttaatc 240
308 aatgcagttg attattgtca tagcaggggt gtgtaccacc gggatttaa accagagaat 300
310 ttactgcttg actcatatgg aaatctgaag gtctctgact ttggactgag tgcgctctct 360
312 cagcaaatca aggatgatgg attgctgcat acaacttgtg ggactccaaa ctacgttgca 420
314 ccagaggtcc tagaagacca aggctatgat ggtgcaatgg ctgatttgtg gtcattgtgga 480
316 gttatcctgt ttgttctgct agctgggtat ttaccttttg aggactctaa tcttatgacg 540
318 ctgtataaga aatatcgaat gcagaatata ca 572
321 <210> SEQ ID NO: 14
322 <211> LENGTH: 188
323 <212> TYPE: DNA
324 <213> ORGANISM: Sorghum bicolor
326 <220> FEATURE:
327 <221> NAME/KEY: unsure
328 <222> LOCATION: (1)..(188)

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329 <223> OTHER INFORMATION: unsure at all n locations
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336 tagatgcact cgtgagcaca atgtgcagcc cattactgct tgactctttt ggtatggctg 120
W--> 338 agaccttatg ctcaaatgt tgcantttg ctggggacct atgacatccg agattagtcc 180
340 ttttgagg 188 ✓
343 <210> SEQ ID NO: 15
344 <211> LENGTH: 303
345 <212> TYPE: DNA
346 <213> ORGANISM: Sorghum bicolor
348 <220> FEATURE:
349 <221> NAME/KEY: unsure
350 <222> LOCATION: (1)..(303)
351 <223> OTHER INFORMATION: unsure at all n locations
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354 <400> SEQUENCE: 15
356 agcgtccgta cagctgcaaa attctgatcg accgttttcc gactttaccc cccccccccc 60
358 cgcccttcac cgtcgggaatc caccgcgacg cgcgcgcgag gagatggcca cggccgcgcg 120
360 gaggcgcct acggctccgc cgtcggctgc ggcgggagat gtctccgagg tggagctctc 180
W--> 362 ggaggggggg gggccggacc tcggcagccg gaggcgggg agcgggnagcg ggggcagcgg 240
W--> 364 ccggagcgcg gcggagtact ccgggtgggt gtaccacctc ngngngaact ccatnnnnca 300
366 cga 303 ✓
369 <210> SEQ ID NO: 16
370 <211> LENGTH: 129
371 <212> TYPE: DNA
372 <213> ORGANISM: Sorghum bicolor
374 <223> OTHER INFORMATION: Clone ID: LIB3476-002-Q6-K1-B5
376 <400> SEQUENCE: 16
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380 caactgaatc tgacatgaca gaagctgcca ggatctcaga atgccatca ctccatcagc 120
382 agcctgcct 129
385 <210> SEQ ID NO: 17
386 <211> LENGTH: 544
387 <212> TYPE: DNA
388 <213> ORGANISM: Sorghum bicolor
390 <223> OTHER INFORMATION: Clone ID: LIB3476-002-Q6-K1-B6
392 <400> SEQUENCE: 17
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396 ttgtagggag aaagattaac tggatgaagg cagggatcat tgagagtgat ctggttctaa 120
398 cagttagtcc acattatgta aaagaactca cttctggccc agaaaaagg gttgagttgg 180
400 atggtgtcct tcgcacaaag cctcttgaaa ctggaattgt aaatggcatg gatgtttatg 240
402 aatgggatcc tgcaactgat aagcacatca gtgtgaaata tgatgcaaca acggcacctg 300
404 aagcaagacc tctcaataaa gaaagattgc aagctgaagt tggattgcct gtggactcga 360
406 gcatccccgt tataattttt gttggccgtc ttgaagaaca gaaaggatct gacatactca 420
408 ttgcagccat tccagaatgt gtggcgaga atgttcagat aattgctctt ggcacaggaa 480
410 agaagaagat ggaggaggaa tcgactcacc tggaaagtga atatcccaac aatgctagag 540
412 gcat 544
415 <210> SEQ ID NO: 18

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Please Note:

Use of n and/or Xaa have been detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

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L:9 M:270 C: Current Application Number differs, Replaced Current Application No
L:9 M:271 C: Current Filing Date differs, Replaced Current Filing Date
L:100 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:102 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:4
L:124 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:5
L:184 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:8
L:252 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:11
L:286 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:12
L:338 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:14
L:362 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:364 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:15
L:442 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:19
L:468 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:20
L:494 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:21
L:564 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:572 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:25
L:600 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:26
L:670 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:672 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:29
L:716 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:31
L:762 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:764 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:33
L:842 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:37
L:862 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:868 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:870 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:38
L:958 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:960 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:42
L:990 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:43
L:1020 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1022 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1024 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1026 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1028 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:45
L:1064 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:1066 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:47
L:1114 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:49
L:1324 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:58
L:1552 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:70
L:1604 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:72
L:1636 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:74
L:1718 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77
L:1720 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:77
L:1804 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:81
L:1826 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:82
L:1878 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:1880 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:84
L:2088 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:94

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L:2196 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:2200 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:99
L:2228 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:100
L:2296 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:103